world, *The Progressive Review* contains nothing that is either dull or trivial. In it each one sincerely interested in the social problem will find food for thought and instruction. We can only wish for it the support which it richly merits not only from the English but also from the American reading public.

REVIEWS.

Appreciation and Interest. By IRVING FISHER. Publications of the American Economic Association. Pp. 112. Price, 75 cents. New York: The Macmillan Company, 1896.

The subject here treated has long invited attention, and in view of its bearing on the monetary controversy it has been unaccountably neglected. The monograph is in three parts, treating respectively, Theory, Facts, and Applications. In part first the proposition is developed "That a [monetary] standard to be perfect need not be invariable. What is required is simply that it shall be *dependable.*" Thus, assuming that the change in relative value is perfectly foreseen, 'if the rate of interest in one standard is 8 per cent, then in another, which depreciates 4 per cent relatively to the first, it will be 12½ per cent," because $100 \times 1.08 = 96 \times 1.125$. This proposition, which, assuming perfect foresight, is self-evident, is elaborated in succeeding chapters to cover cases of compound interest, varying rates, etc.

In Part II the author seeks to ascertain how far the foresight, which he had before assumed, actually exists in business. "A definite test must be sought where two standards are simultaneously used." He first considers the case of coin and currency bonds of the United States. Currency was below par, but was appreciating, with the prospect of resumption. The rate of interest on currency bonds (determined, of course, by the selling price of the bonds) ought, therefore, to have been less. Such was indeed the case. But while the actual appreciation of currency during the period chosen averaged 2.1 per cent per year, the compensating decline in the interest rate averaged .8 per cent, or a little over one-third. A similar result follows on comparison of gold and silver bonds issued by the Indian government during the period when silver was falling in price. The holders of silver bonds anticipated the fall of silver to the extent of about one-third and protected themselves accordingly, losing the other two-thirds.

Finally, a comparison is made as to the rate of interest during periods of high and low prices, and (more pertinently) rising and falling prices in seven different countries, with a like result. A certain

compensation is detected, but it is very partial and uneven. It is inconspicuously noted in passing that "interest on private loans and farm mortgages . . . is less flexible, and the debtor's losses or gains in these cases are doubtless somewhat greater."

To these computations as to gold, currency, silver and commodity interest is added an interesting computation of interest in terms of labor. It appears "for 1849–57 and 1875–91 that the money rates were 8.2 and 5.2 per cent, the commodity rates 4.1 and 7.3 per cent, but the labor rates 7.0 and 4.8 per cent. We see, therefore, that in terms of labor, loans in America have actually been *easier* during 1875–91 than during 1849–57."

A general conclusion from these studies is that natural selection chooses as "captains of industry" those who have the foresight necessary for the management (*i. e.*, the borrowing) of capital.

The "applications" in Part III are to the bimetallist controversy. They begin with a concession to the bimetallist that there has been an uncompensated annual appreciation of from ⅓ to ⅔ per cent. This is followed by a criticism of Sauerbeck's index numbers, which give an average annual appreciation since 1875 of 2.7 per cent. The system is declared to be "subject to fatal objection . . . both because they are based on wholesale instead of retail prices and because they ignore expenditure for rent and for labor and domestic service in the family budgets of those who borrow and lend." And in any case "the question is not one of appreciation of gold. . . . It is . . . exclusively a question of foresight and of the degree of adaptation of the rate of interest."

Next it is claimed that bimetallism cannot correct past injustice, and, finally, that the fact of loss is not proof of injustice. "If a man insures his house and it burns the next day the insurance company suffers a loss, but not an injustice. If the company should ask for legislative relief, . . . it would be laughed to scorn." "A farmer mortgages his farm for $1000 and 5 per cent interest. By the terms of the contract he takes all risks as to what the dollar will buy of wheat or anything else."

The book closes with a strong assertion that the gold standard is not necessarily permanently favorable to the creditor. "What bimetallist will risk his reputation in predicting the course of prices and interest in the next twenty years? *If* prices rise, we may with great probability predict that the debtor will win. *If* they fall, he will lose. But who knows which is the true 'if?'"

The work is of unequal value. It shows intelligence and industry throughout; the variable factor is its candor. The latter is sufficient for pure mathematics and absolute deduction. Part I is therefore

excellent. The only criticism is as to the use of complicated mathematical formulæ to express a simple proposition. They give it no added force, they lend it an unjustifiable appearance of exactness, and finally, they deter the uninitiated. The readers who will labor through this part of the work can be counted on one's fingers.

Part II is more valuable but more open to criticism. The *a priori* reasoning, of course, was easy. The important thing is to know how far the fundamental assumption of foresight is justified. Candor was more needed and less manifest. For instance, when we are told that interest on Indian silver bonds averaged .8 per cent higher than on gold as an offset to depreciation, it is conceded that another tenth should be subtracted because there was a constant and normal divergence of *two*-tenths before silver fell due to the friction of international exchange. The halving of this amount on the assumption of remote prevision seems unwarranted and is uncomfortably suggestive. The conclusion drawn from a comparison of interest in gold and silver using countries is certainly strained, while the computation of labor interest involves a glaring fallacy. But that which vitiates the conclusion most of all is the neglect of the time factor in the bonds compared. The currency bonds in the first comparison were to run ten years longer than the coin bonds, a fact which in view of the vicissitudes of investment and the natural fall in the rate of interest militates strongly in their favor and tends to depress the rate of interest. But what shall be said when silver bonds payable on three months' notice are compared with gold bonds running fifty or sixty years? Is there nothing in this permanency of investment calculated to tempt capital and lower the rate of interest? It is difficult to excuse the omission of a factor which is of itself sufficient to account for the major part of the difference in the interest rate. Nevertheless this part of the book is a valuable contribution, and would certainly have been so recognized had the next part been omitted. Here candor seems altogether lacking.

The first glaring fallacy to be met with in part third is the criticism of the index number system. The real criticism to be made against the index numbers, that we reach different results according to the number of commodities and the method of "averaging," is slighted, presumably because it is well known to have produced but slight error in practice thus far. But when the author asserts that retail prices should be considered instead of wholesale, and that rent, labor and services should be included as forming part of the family budget, he betrays a total ignorance (or neglect) of the real relation between prices and debts. What has the family budget to do with the case? Must we at this date enter upon the trite inquiry as to who the debtor

is, and why falling prices injure him? Apparently so. He is not the poor man, the laborer or even the average householder as such. He is "the captain of industry," so our author himself tells us, the one to whom by means of loans "society delegates the management of capital." He borrows, not for household expenses nor to repay in services, but for productive investment, and in amounts compared with which the "family budget" is but a bagatelle. He must pay these loans with products sold at *wholesale* prices. Finally, he is not a receiver but a payer of wages. Wages must, therefore, be considered, but not by introduction into the general average. A rise in wages does not compensate the entrepreneur for a fall in prices; *it aggravates his burdens.* To assume that a rise in wages makes loans "*easier* in the labor standard" is to travesty industrial relations, for the simple reason that the payer of interest is in general a buyer and not a seller of labor.

The next fallacy is less excusable. We are told that the borrower assumes certain risks in his contract from which he has no claim to be relieved any more than the insurance company from paying an unexpected loss. Who ever denied this? The bimetallist may well accept a comparison which so admirably serves his purpose. An insurance company takes risks and must pay its losses; but suppose the insured community wantonly or carelessly increases those risks, neglects its fire department and its water service, and leaves arson unpunished. Is this no injustice; has the company no right to protest, and must its grievance be laughed to scorn or met with the derisive shout, "keep your contract?" Doubtless risks incurred must be borne, but should we or should we not by our collective action seek to minimize those risks? I venture the assertion that few things better gauge the industrial development of a community than the degree of certainty which it has achieved in its economic activities. When it is proposed to farther eliminate risk, the reminder that the individual must not escape his contractual obligations is perniciously irrelevant, an effort to sidetrack discussion which is as unworthy as it is unacademic.

But the climax is yet to come. The gold standard is not to be regarded as favorable to the creditor, because no man knows whether under it prices will continue to fall or not, let alone all question of amount. Indeed! Then how about this much assumed foresight by means of which men were to forestall these changes? The author has thus laboriously climbed the tree of knowledge and then sawed off the limb on which he sat.

But the author's fallacies should not discredit the real results of his investigation. It is plain that changes in the value of money when foreseen do influence the interest rate by way of compensation.

This foresight under the most favorable conditions effects this compensation to an extent not exceeding one third. Under less favorable conditions and for the most numerous class of borrowers the compensation is less, if indeed there is any at all. Incidentally, too, some light is thrown on the cost of this compensatory process. Through loss and "discouragement" the entrepreneur learns to "bid lower rates." The meaning of this discouragement continued through a long period of falling prices will not escape the careful reader. More in need of elaboration is the influence of natural selection. This, we are told, chooses entrepreneurs skilled in forecasting the value of money. Certainly, but the prominence given to this quality is purchased at the expense of some other. The expert mechanician is displaced by the shrewd financier. If natural selection is to provide the most productive entrepreneurs she must not be handicapped in her choice by emphasis laid on other qualities.

Elaboration along these and other lines would have made the book more complete, more useful and more just. Nevertheless it is, in its present form, another argument, and a powerful one, in favor of the contention that the present standard is one ill adapted to the needs of an advanced industrial civilization.

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The Coming Individualism. By A. EGMONT HAKE and O. E. WESSLAU. Pp. xi, 347. Price, $4.00. London: Archibald Constable & Co., 1895.

This book will make few converts. Hard-headed men are at best inclined to receive with caution the doctrine of "a coming ——ism." When the prophet descends from his high place to become the vendor of a social nostrum, and a retrospect impressively unfolded as a philosophy of history appears as a mere bolster to an economic panacea—the message must possess some extraordinary merit to save itself from the quick oblivion of a tract of the times.

Such merit does not attach to the present work. In its general aspect, it is a successful instance of what the late Mr. Bagehot has called "conjectural history"—a fictitious interpretation of the possible causes of things existing. A widespread socio-economic unrest, a consistently non-individualistic policy—and a nexus is self-established! The purpose of the volume, on page 11, to show that "all the poverty and misery permeating the civilized states, except such as is deliberately self-inflicted or the result of ill-health, are due to temporary and local mistakes in legislation" develops, by page 194, into the placid conclusion that "powerful and irresistible causes of